



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/541,611

07/07/2005

Satoshi Yamanaka

0925-0220PUS1

8340

2292 7590 04/12/2010
BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

ZHU, RICHARD Z

ART UNIT

PAPER NUMBER

2625

NOTIFICATION DATE

DELIVERY MODE

04/12/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

DETAILED ACTION

Response to Applicant's Arguments

1. In response to “Claimed Assumption”:

First and foremost, the claim requires “wherein said test interpolation data is calculated for each of said normal pixels on the assumption that said normal pixels are lost using said different interpolation method”. In order to determine patentability, the most important question is whether the assumption that said normal pixels are lost using said different interpolation method actually affects the manner in which test interpolation data is calculated in a way that it distinguishes over the prior art? As noted by the applicant, “the actual interpolation techniques, once the assumption is made, may not be different from prior art techniques”, it does not. For this reason, the limitation can’t be given patentable weight even if the examiner wants to because it doesn’t articulate the difference between prior art techniques of calculating test interpolation data vs. applicant’s techniques of calculating test interpolation data.

Second, Webster's II defined assumption as “something taken to be true without proof or demonstration”, otherwise known as something taken for granted. How does one give patentable weight to something that is taken for granted? Under 35 USC 101, an assumption is not an article of manufacture, composition of matter, a machine, or even a useful process because a useful process details a step by step demonstration of why something is true; in this case, a demonstration of how applicant’s manner of calculating test interpolation data is different from the prior art.

Indeed, in the current claim, it appears that the pixel interpolation circuit takes for granted the fact that pixels are lost and calculates test interpolation data regardless of any limiting condition, something that prior art interpolation circuit can do just as well. Thus, “wherein said test interpolation data is calculated for each of said normal pixels on the assumption that said normal pixels are lost using said different interpolation method” is not a limiting step that further limits the interpolation at all.

2. In response to *Ashibe*:

A translation of *Ashibe* is now available and it appears that *Ashibe* performs interpolation for interpolating a lost pixel. *Ashibe* appears to teach a compression and decompression scheme where decompression is performed using an interpolation process and it is made correspond to a specific thinning / compression scheme.

According to *Ashibe*, pixels are thinned or compressed by a compression ratio or thinning ratio such that the compressed image would not have the same number of pixels as the original image. Accordingly, to reconstruct the image during a decompression process, pixels that were thinned are reconstructed using interpolation (**Page 5, Means for solving the problem**). Substantially, *Ashibe* made the assumption that pixels are going to be lost or thinned during the compression / thinning process and reconstruction by interpolation is necessary. Further, *Ashibe* specifically mentioned “then, the sum in the block of the absolute value of the difference between an interpolation signal and an original signal....is calculates”. Thus, the sum is generated by adding up the absolute value difference between each of the interpolated pixel, which was lost during the compression / thinning process within each block, and actual / original pixel data.

Art Unit: 2625

Further, nothing in Claim 1 suggests “the selection of an interpolating method is made for each lost pixel”. Rather, Claim 2 specifically suggested “selects one of the interpolation circuits based on the evaluation data”, the evaluation data being “summing up the absolute values of the difference between test interpolation data and the actual pixel data”; which is exactly how *Ashibe* goes about selecting a thinning out and interpolating method (**compression and decompression scheme**).

For the reasons above, current grounds of rejection are sustained.

/Richard Z. Zhu/

Examiner, Art Unit 2625

/King Y. Poon/

Supervisory Patent Examiner, Art Unit 2625